SUBJECT INDEX TO VOLUME 49

(abs) = abstract (E) = editorial

Abdomen, lower, diaphragmatic movement after operations on (abs), 275
Abscess, intraperitoneal localized, roentgen aid in diagnosis (abs), 276
Acidosis, postoperative, occurrence of, in hyperparathyroidism (abs), 134
Actinic value of afterglow of fluorescing screen, quantitative estimation of (abs), 571
Adenocarcinoma, papillary, of kidney (abs), 835
Adrenal glands, metastasis to, from primary carcinoma of breast (abs), 136
tumors of, use of air insufflation in diagnosis (abs), 835
Air insufflation, use of, in diagnosis of tumors of adrenal (abs), 835
Alimentary tract, distant metastasis in cancer of (abs), 136
American Board of Radiology, announcement of dates of examination, 419
notice of examination to be held in 1943, 124
American College of Physicians, notice of cancellation of 1943 annual session, 123
American Radium Society, announcement of cancellation of 1943 meeting, 419
Aneurysm of intercostal artery (abs), 274
Angiocardiography in congenital heart disease, intracardiac shunts, 766
inexpensive cassette changer for, 829
Ankle joint, osteochondritis of, use of tomography as diagnostic aid (abs), 426
Ankylostomiasis, duodenal ulcer syndrome caused by, 39
Aorta, right-sided (abs), 274
Apophyseal intervertebral joints, development, clinical manifestations, and treatment of rheumatoid arthritis of, 49
Apparatus for radiography in immediate connection with roentgenoscopy (abs), 567
Arteriography, cerebral, with diodrast, 50 per cent (abs), 706
Artery, intercostal, aneurysm of (abs), 274
Arthritis, rheumatoid, of apophyseal intervertebral joints, development, clinical manifestations, and treatment of, 49
septic, of hip, obturator sign in early roentgen diagnosis of (E), 117
Asthma, chronic, therapeutic value of roentgen treatment in, 227
Atelectasis, recurrent postoperative (abs), 708
"reversible" and "irreversible" massive pulmonary, roentgen study (abs), 709
"Back-scatter phantom," portable, for roentgen-ray measurements (abs), 144
Bicipital groove, further studies of shoulder joint with special reference to (abs), 288
Bile duct, common, peristalsis of (abs), 132
terminal common, and duodenal papilla, roentgenological consideration (abs), 132
Biopsy, limitations of, in roentgen therapy (abs), 566
material, human, from irradiated carcinomata, quantitative examination of (abs), 568
Bladder, urinary, cancer of (abs), 282
urinary, distant metastases from carcinoma of (abs), 282
urinary, neoplasm complicating diverticulum of (abs), 283
urinary, osteoma of (abs), 283
urinary, roentgen demonstration of prevesical spaces (abs), 283
urinary, use of intravesical low voltage contact roentgen irradiation in cancer of (abs), 429
"Blast chest," roentgen aspect of pulmonary changes following exposure to high pressure waves (abs), 712
Bleeding associated with extramucosal tumors of stomach, 442
in hiatus hernia, 433
Bone and joint tuberculosis, statistical and roentgen analysis of 200 cases of (abs), 425
benign giant cell tumor of, late results obtained by radiation therapy (abs), 431
changes, pagetoid, in hyperparathyroidism (abs) 134
marrow, radiosensitiveness of (abs), 568
metastases from carcinoma of prostate, relationship of serum acid phosphatase determination to presence of (abs), 284
post-traumatic necrosis of, 593
primary malignant tumors of, roentgenologic considerations in diagnosis and treatment of (abs), 285
Bones, growing long, of albino rats, effect of roentgen rays upon, 321
short, of extremities, variability in onset of ossification in, 795
Book Reviews
An X-ray Atlas of Silicosis. By Arthur J. Amor, 125
Malignant Disease and Its Treatment by Radium. By Stanford Cade, 125
The 1941 Year Book of Radiology. Edited by Charles A. Waters, Whitmer B. Firor, and Ira I. Kaplan, 126
Epilepsy and Cerebral Localization. By Wilder Penfield, 126
Clinical Roentgenology of Pregnancy. By William Snow, 265
Roentgen Treatment of Infections. By James F. Kelly, 265

Physical Medicine. By Frank H. Krusen, 266
The Treatment of Burns. By Henry N. Harkins, 266
The Doctors Mayo. By H. B. Clapesattle, 549
Roentgen Technique. By Clyde McNeill, 550
Nutrition and Chemical Growth in Childhood. Volume I. Evaluation. By Icie G. Macy, 550
Diseases of the Nails. By V. Pardo-Castello, 551
Surgical Physiology. By Joseph Nash, 551
Directory of Medical Specialists Certified by American Boards, 1942, 552
Intestinal Obstructions. By Owen H. Wangensteen, 700
Roentgen Interpretation. By George W. Holmes and Howard E. Ruggles, 701
Die Deutung des Röntgenschichtbildes der Longenspitzen bei Lungentuberkulose. By Wilhelm Kremer and Leonore Retzlaff, 701
X-Ray Therapy of Chronic Arthritis (Including the X-ray Diagnosis of the Disease). By Karl Goldhamer, 702
Brachyesophagus with dystopic cardia (abs), 272
Brain tumors, experiences with roentgen irradiation following operation on, 480
irradiation of, at Bellevue Hospital 1924–1929 (abs), 430
roentgen therapy of (abs), 431
Breast cancer, study of results following radical removal and postoperative roentgen therapy (abs), 431
extraordinary calcification in, 600
male, carcinoma of (abs), 713
primary carcinoma of, metastasis of (abs), 136
Bronchi, stenosis of, and unexpandable lungs (abs), 709
Bronchomoniliasis (abs), 711
Bronchopneumonia associated with recent virus pneumonitis, roentgenographic characterization, 30
Bronchoscopic clinic (abs), 715
Bulletin of American College of Radiology, 121
Bursitis, calcified subacromial, roentgen irradiation of (abs), 558

Calcareous deposits about shoulder, roentgen irradiation of (abs), 558
Calcification, extraordinary, in breast, 600
miliary, of lung, 777
of renal tumors, 580
Calcified pulmonary lesions (E), 823
Calcinosis universalis (abs), 138
Calculator, simple, for roentgenographic mensuration (abs), 574
Caldwell Lecture, 1942, 289
Cancer, cervical, post-irradiation stricture of rectum and sigmoid following treatment for, 307
epithelial, classification of, based upon site of origin, 99
gynecological, present status of treatment of (abs), 141
instrument for inserting multiple capsules of radium within uterus in treatment of, 504
intrathoracic, million volt roentgen therapy for, 299
of bladder (abs), 282
of bladder, use of intravesical low voltage contact roentgen irradiation in (abs), 429
of breast, study of results following radical removal and postoperative roentgen therapy (abs), 431
of cervix, effect on rate of cure of increased roentgen radiation to parametria, 519
of cervix, elimination of irradiation injuries in treatment of, 494
of cervix, irradiation in (abs), 559
of esophagus, roentgen treatment of, 606
of head and face, protracted roentgen treatment of (abs), 140
of rectum and rectosigmoid treated with radium (abs), 561
of rectum, urological complications of (abs), 284
of stomach, factors influencing curability of (abs), 131
of upper respiratory and alimentary tracts, distant metastasis in (abs), 136
of uterine cervix, irradiation of, combining radium and supervoltage roentgen rays (abs), 560
of uterine cervix, isodose charts for fields of special usefulness in treatment of, 819
of uterus, results of present method of radium therapy as influenced by stage and grade of the lesion, 487
pharyngeal and laryngopharyngeal, surgery and radiation therapy in treatment (abs), 139
prostatic (abs), 836
research, newer aspects of, 289
rôle of gynecologist in field of, 1
significance of sedimentation reaction as regards prognosis of irradiation of patients with (abs), 567
Teaching Day, 419, 828
Capillary permeability in skin of rabbit, effect of roentgen irradiation on, 250
Capitate, retrolunar dislocation of, with fracture or subluxation of navicular bone (abs), 288
Carcinoma, advanced, of prostate gland, effects of castration on (abs), 836
erysipelatodes (abs), 135
gastric, classification of (abs), 130
irradiated, quantitative examination of human biopsy material taken from (abs), 568
metastatic, of epididymis (abs), 283
nasopharyngeal (abs), 706
of cervix, radium distribution factor in therapy of (abs), 560

of cervix, roentgen irradiation of pelvis in (abs), 558
of head of pancreas, new signs in roentgen diagnosis, 197
of large intestine (abs), 132
of lower intestinal tract (abs), 131
of male breast (abs), 713
of pelvic colon, combined irradiation and surgery in treatment of (abs), 561
of prostate, relationship of serum acid phosphatase determination to presence of bone metastases from (abs), 284
of prostate with irradiation of testicles, treatment of (abs), 562
of upper extremity (abs), 135
of urinary bladder, distant metastases from (abs), 282
oral (abs), 705
papillary, of renal pelvis, diagnosis and treatment (abs), 835
primary, of breast, metastasis of (abs), 136
primary, of jejunum (abs), 275
value of gastroscopy in diagnosis of (abs), 716
Cardia, dystopic, brachyesophagus with (abs), 272
Cardiospasm (abs), 272
Carpal boss, commonly overlooked deformity of carpus (abs), 287
scaphoid, conservative and operative treatment of fractures of (abs), 288
Cassette changer, inexpensive, for angiocardiography, 829
Castration, effects of, on advanced carcinoma of prostate gland (abs), 836
Cathcart, John Watson, 1877–1942, obituary, 415
portrait, 415
Cell division, multipolar, induction of, with roentgen rays, possible significance (abs), 569
Cerebral arteriography with diodrast, 50 per cent (abs), 706
Chaoul therapy (abs), 429
further experiences with (abs), 430
Chest. See Thorax
Children, diagnosis of congenital heart lesions in, 366
excretory urography for (abs), 279
limitations of irradiation of solid renal tumors in (abs), 562
study of gastrointestinal tract of, and its relation to adult (abs), 718
study of "widened" mediastinum in, and pitfalls in diagnosis, 159
Cholangiography, fractional method (abs), 833
Cholecystography, aid in, 699
Chondryodystrophia calcificans congenita, 77
Clostridium welchii infection, experimental, in dogs, roentgen radiation in (abs), 564
Coccidioidomycosis, acute, roentgen findings in a group "epidemic" (abs), 707
Colon, pelvic, combined irradiation and surgery in treatment of carcinoma of (abs), 561
Compression of heart (abs), 273
Condensers and shock-proof cables, effect of, on two-valve half-wave rectification (abs), 571
Congenital duodenal obstruction (abs), 832
heart disease, angiocardiography in, 766
heart lesions in children, diagnosis of, 366
tracheoesophageal fistula (abs), 713
valvular lesions, diagnosis, of, 366
Congress of Radiology, First Inter-American, 698
Contact roentgen therapy tubes, simple way to hold filter in place on, 128
Contrast media, roentgen visualization of stomach without use of (abs), 275
visualization of heart and great vessels (abs), 273
Cor pulmonale, chronic, relation to pulmonary tuberculosis (abs), 710
Coutard's method of roentgen therapy (abs), 140
Cyclic changes in mammary gland of Rhesus monkey (abs), 143
Cyst, hydatid, of liver (abs), 132
Cystic disease of kidney, atypical pyelograms in (abs), 278
lungs of rare origin (abs), 271
Cysts, myxomatous cutaneous, roentgen treatment of (abs), 566

Deformity of carpus, commonly overlooked (abs), 287
Dermatology, irradiation in (abs), 566
Dermoids (abs), 137
Dextrocardia, diagnosis of, 366
Diaphragm, hernia, roentgenologic considerations in diagnosis and treatment of, 185
movement of, after lower abdominal operations (abs), 275
Diaphragmatic hernia of stomach (abs), 276
hernia, parasternal, with report of case on right side (abs), 717
Dilatations of spinal cord veins, roentgen diagnosis of, 476
Diodrast, 50 per cent, cerebral arteriography with (abs), 706
Dislocation, retrolunar, of capitate with fracture or subluxation of navicular bone (abs), 288
traumatic, of hip, aseptic necrosis of femoral head following (abs), 428
Diverticula of duodenum (abs), 832
Diverticulum of bladder, neoplasm complicating (abs), 283
Dogs, normal, effect of hard roentgen rays on intestines of, fed on inorganic iron compounds (abs), 142
roentgen radiation in experimental Clostridium welchii infection in (abs), 564
Dosage distribution in radiation teletherapy, homogeneity of (abs), 573
integration of radiation, and absorption of energy in tissue for roentgen and gamma radiation (abs), 573
Dose contours, geometrical methods of projecting (abs), 432

depth, calculation, wherein absorption in unit volume in depth is index of effective radiation (abs), 572
depth, in fields of irregular shape (abs), 573
depth, survey of data on (abs), 573
Dosimeters, evolution of, in roentgen-ray therapy (abs), 572
Ductus arteriosus, patent, diagnosis of, 366
Duodenal papilla and terminal common bile duct, roentgenological considerations (abs), 132
Duodenum, congenital obstruction of (abs), 832
diverticula of (abs), 832
roentgen consideration of normal mucosa of (abs), 832
ulcer syndrome of, caused by ankylostomiasis, 39
Dust hazard in tremolite talc mining, 11
Dyke, Cornelius G., announcement of death of, 695
Dyschezia, rectal (abs), 717

Ear, external, roentgenography of, 420
Ectopia, bilateral renal (abs), 281
Edema, pulmonary, roentgenological manifestations of (abs), 271
Editorials
The obturator sign in the early roentgen diagnosis of septic arthritis of the hip, 117
Roentgenologic examination and, not or, gastroscopy, 259
Roentgenography as a diagnostic aid in pulmonary fat embolism, 410
Harry Myrrel Stewart, 1876–1942, 413
John Watson Cathcart, 1877–1942, 415
Megavoltage roentgen therapy, 540
Joseph Francis Elward, 1890–1943, 544
Pyelograms in essential or hormonal hypertension, 692
Edward George Meter, 1876–1943, 694
Calcified pulmonary lesions, 823
Effect, indirect, of roentgen rays in single and parabiotic mice, 662
of emotions upon esophageal function (abs), 715
of hard roentgen rays on intestines of normal dogs fed on inorganic compounds (abs), 142
of high and low body temperatures upon growth of irradiated mouse sarcoma 180 (abs), 568
of roentgen irradiation on capillary permeability and inflammation in skin of rabbit, 250
of roentgen irradiation on epiphyseal growth, 104
of roentgen irradiation upon lymphatic flow in rats (abs), 567
of roentgen rays upon growing long bones of albino rats, 321
of roentgen therapy for closure of epiphyses (abs), 558
of shock-proof cables and condensers on two-valve half-wave rectification (abs), 571
Effusion, pleural, roentgenographic study of (abs), 274
Eisenmenger complex, diagnosis of, 366
Electrocardiography and roentgen cinematography, study of cardiac movements simultaneously recorded by (abs), 570
Elward, Joseph Francis, 1890–1943, obituary, 544
portrait, 544
Embolism, pulmonary fat, roentgenography as diagnostic aid in (E), 410
Endochondral growth centers, histopathological changes involving, in albino rats after roentgen irradiation, 321
Energy absorption (abs), 144
Engineering research, recent contributions of, to radiology (abs), 570
Epidermitis, severe irradiation, ointment for relief of discomfort due to (abs), 566
Epidermoids, intraspinal (abs), 137
Epididymis, metastatic carcinoma of (abs), 283
Epidurography, new method of demonstrating protrusion of intervertebral disc (abs), 426
Epiphyseal growth, effect of roentgen irradiation on, 104
Epiphyses, effect of roentgen therapy for closure of (abs), 558
of extremities, variability in onset of ossification in, 795
Epithelial cancers, classification of, based upon site of origin, 99
Erythema nodosum, mediastinal and pulmonary changes in (abs), 271
Esophagus, brachyesophagus with dystopic cardia (abs), 272
cancer, million volt roentgen therapy for, 299
cancer, roentgen treatment of, 606
congenital short, 185
influence of emotions upon function of (abs), 715
report of case of mega-esophagus, with subdiaphragmatic herniation of (abs), 272
Eustachian tube, radiological visualization of (abs), 706
Evolution of x-ray tube (abs), 143
Ewing's tumor, gradation of (abs), 285
Extramucosal tumors of stomach, bleeding associated with, 442
Extravasation, urinary (abs), 837
Extremities, variability in onset of ossification in epiphyses and short bones of, 795
Extremity, upper, carcinoma of (abs), 135
Eyes, cataractous, roentgen measurement of visual acuity in (abs), 269

Face, cancer, protracted roentgen treatment of (abs), 140
cavernous hemangioma of, in infant treated with radium, 816
Femoropatellar joint, roentgenology of (abs), 425
Femur, aseptic necrosis of head of, following trau-

matic dislocation of hip (abs), 428
device to aid in positioning for lateral roentgenograms of neck of, 264
Fetal and pelvic diameters, accuracy of roentgen estimates of (abs), 834
Fibrosarcoma, periosteal (abs), 134
Filter, simple way to hold in place on contact therapy tubes, 128
Fistula, congenital tracheoesophageal (abs), 713
gastrocolic (abs), 718
Fluoroscopic room, stray radiation in, 123
Focal spot size determination, accuracy of (abs), 572
Foreign body, new method of determining position of, from single-film stereoroentgenograms, 682
Fracture of navicular bone, retrolunar dislocation of capitate with (abs), 288
Fractures, limitations of roentgen diagnosis of (abs), 133
of carpal scaphoid, conservative and operative treatment of (abs), 288
of vertebrae following metrazol therapy (abs), 428

Gas gangrene, experimental infection in dogs, roentgen radiation in (abs), 564
twelve year review of roentgen therapy of (abs), 564
Gastritis, chronic, surgical problem of (abs), 130
Gastrocolic fistula (abs), 718
Gastrointestinal tract of children and its relation to the adult, study of (abs), 718
Gastroscopist and roentgenologist, value of cooperation between (abs), 716
Gastroscopy and roentgen examination (E), 259
practical evaluation of (abs), 716
unusual sequel to (abs), 717
Geometrical methods of projecting dose contours (abs), 432
Georgia Radiological Society, 264
Ghon's tubercle, re-evaluation of a concept, 463
Guinea pig, roentgen treatment of experimental pneumonia in (abs), 569
Gynecological cancer, present status of treatment of (abs), 141
Gynecologist, rôle of, in field of cancer, 1

Head, cancer, protracted roentgen treatment of (abs), 140
malformation of, in mongoloid deficiency (abs), 705
Healy, William P., Janeway Lecturer, 1942, portrait opposite page 1
Heart, and great vessels, contrast visualization (abs), 273
compression of (abs), 273
congenital lesions of, in children, diagnosis, 366
disease, congenital, angiocardiography in, 766
study of movements of, simultaneously recorded by roentgen-cinematography and electrocardiography (abs), 570
Hemangioma, cavernous, of face in infant treated with radium, 816
of vertebrae (abs), 427
Hemangiomata, roentgen therapy of (abs), 564
Hernia, diaphragmatic, of stomach (abs), 276
diaphragmatic, roentgenolcgic considerations in diagnosis and treatment of, 185
hiatus, bleeding in, 433
parasternal diaphragmatic, with report of case on right side (abs), 717
Hiatus hernia, bleeding in, 433
Hip, aseptic necrosis of femoral head following traumatic dislocation of (abs), 428
obturator sign in early roentgen diagnosis of septic arthritis of (E), 117
Hookworm, roentgen changes in small intestine in presence of, 719
Hunner's ulcer, treatment of, with deep roentgen therapy (abs), 563
Hydatid cyst of liver (abs), 132
Hydrocephalus, intrauterine, roentgen diagnosis of (abs), 834
Hyperparathyroidism, occurrence of postoperative acidosis and pagetoid bone changes in (abs), 134
Hypertension, essential or hormonal, pyelograms in (E), 692

Image reinforcement, latent in fluorescing screen, simple method of detecting experimentally presence of phenomenon of (abs), 571
Infant, cavernous hemangioma of face in, treated with radium, 816
Infantile scurvy, critical analysis of roentgen signs of, 575
Infants, mediastinal pleurisy in, 145
Inflammation in skin of rabbit, effect of roentgen irradiation on, 250
Injuries, irradiation, elimination of, in treatment of cancer of cervix, 494
Interauricular septum, defect of, diagnosis, 366
Interventricular septum, defect of, diagnosis, 366
Intervertebral disc, diagnosis of posterior protrusion of, 199
disc, epidurography a new method of demonstrating protrusion of (abs), 426
disc, protruded, intraspinal thorotrast used in diagnosis of, 214
disc, ruptured, surgical aspects of (abs), 426
disc, significance of degenerative lesions of, 199
joints, apophyseal, development, clinical manifestations and treatment of rheumatoid arthritis of, 49
Intestinal tract, lower, carcinoma of (abs), 131
Intestine, large, carcinoma of (abs), 132
small, changes in, in irradiation sickness (abs), 138

small, clinical significance of roentgen findings of (abs), 833
small, roentgen changes in, in presence of hookworm, 719
Intestines of normal dogs fed on inorganic iron compounds, effect of hard roentgen rays on (abs), 142
Intraperitoneal abscess, localized, roentgen aid in diagnosis (abs), 276
Intrathoracic cancer, million volt roentgen therapy for, 299
manifestations of lymphomatoid diseases (abs), 273
neurogenic tumors (abs), 714
Irido-cyclitis, chronic, uveo-parotitis and tuberculosis, roentgen aspects of investigation into relationship of (abs), 270
Iron compounds, inorganic, effect of hard roentgen rays on intestines of normal dogs fed on (abs), 142
Irradiation and surgery, combined, in treatment of carcinoma of pelvic colon (abs), 561
control of testicular tumor metastases (abs), 562
epidermitis, severe, ointment for relief of discomfort due to (abs), 566
in dermatology (abs), 566
injuries, elimination of, in treatment of cancer of cervix, 494
limitations of, of solid renal tumors in children (abs), 562
of cancer of uterine cervix, combining radium and supervoltage roentgen rays (abs), 560
of cancer patients, significance of sedimentation reaction as regards prognosis of (abs), 567
of liquids (abs), 143
of testicles, treatment of carcinoma of prostate with (abs), 562
sickness, prevention of, 83
sickness, studies in (abs), 138
stricture of rectum and sigmoid following treatment for cervical cancer, 307
Isodose charts for fields of special usefulness in treatment of cancer of uterine cervix, 819

Janeway Lecture, 1942, 1
medal, for 1942, presentation of, 10
Jejunum, primary carcinoma of (abs), 275
Johnson stereoroentgenometer, analysis of roentgen pelvimetry by, in 379 cases, 742
Joints, apophyseal intervertebral, rheumatoid arthritis of, 49

Kidney, atypical pyelograms in cystic disease of (abs), 278
bilateral ectopia of (abs), 281
calcification of tumors of, 580
exploration of certain tumors of (abs), 281
increasing density of shadow of, during excretion urography (abs), 278
papillary adenocarcinoma of (abs), 835
papillary carcinoma of pelvis of, diagnosis and treatment (abs), 835
primary intrarenal lipoma of surgical significance (abs), 280
return of function of, after long apparent absence (abs), 562
roentgenology of tuberculosis of (abs), 279
solid tumors of, in children, limitations of irradiation of (abs), 562
spontaneous rupture of pelvis of (abs), 280
subcapsular rupture of (abs), 280
tuberculoma of (abs), 281
tubules, reaction of, in tissue culture to roentgen rays (abs), 569
Kirklin, B. R., appointed x-ray consultant in Office of Surgeon General of Army, 828
Knee joint, good projection for (abs), 425

Laryngopharynx, cancer, surgery and radiation therapy in treatment (abs), 139
Leiomyosarcoma of prostate gland (abs), 836
of stomach, 393
Leukemia, chronic macrolymphocytic and mesolymphocytic lymphatic, roentgen therapy for (abs), 565
retention in blood, excretion and therapeutic effect of radio-phosphorus on patients with (abs), 142
Light reversal process, duplications of roentgenograms by, 554
Lipiodol, misplaced spinal (abs), 838
Lipoma, primary intrarenal, of surgical significance (abs), 280
Liquids, irradiation of (abs), 143
Lithiasis, pancreatic (abs), 276
Liver, hydatid cyst of (abs), 132
Lobectomy, pulmonary, postoperative complications of (abs), 713
Localization, roentgenologic, of placenta without contrast media, 750
Lungs, calcified lesions of (E), 823
cancer, million volt roentgen therapy for, 299
changes in, in erythema nodosum (abs), 271
cystic, of rare origin (abs), 271
miliary calcification of, 777
postoperative complications of pulmonary lobectomy (abs), 713
pyogenic osteomyelitis of thoracic spine presenting as primary disease of, 219
roentgen aspect of changes in, following exposure to high pressure waves (abs), 712
roentgenography as diagnostic aid in fat embolism of (E), 410
roentgenological manifestations of edema of (abs), 271
traumatic changes in, through blunt violence to thorax, roentgen investigation (abs), 271
unexpandable (abs), 709
Lymphadenitis, tuberculous cervical, roentgen therapy in (abs), 563

Lymphangioma, radiation treatment of, 799
Lymphatic flow in rats, effect of roentgen irradiation upon (abs), 567
Lymphoblastoma, radiotherapy of (abs), 565
Lymphogranuloma inguinale producing rectal stricture (abs), 277
Lymphomatoid diseases, intrathoracic manifestations of (abs), 273
Lymphosarcoma of prostate gland (abs), 836
secondary, of stomach, 450

Malformation of head in mongoloid deficiency (abs), 705
Mammary gland of Rhesus monkey, cyclic changes in (abs), 143
Measurement, roentgen, of visual acuity in cataractous eyes (abs), 269
simple calculator for roentgenographic (abs), 574
Measurements, roentgen-ray, portable "back-scatter phantom" for (abs), 144
Mediastinal changes in erythema nodosum (abs), 271
pleurisy in infants, 145
Mediastinum, study of "widened" in children, pitfalls in diagnosis, 159
Mega-esophagus (abs), 272
Megarectum, rectal dyschezia a misnomer for (abs), 717
Megavoltage roentgen therapy (E), 540
Melorheostosis (abs), 286
report of bilateral case, 398
Mesothorium, toxicity of, 240
Metabolic disturbances, roentgen changes in cranial vault accompanying diseases resulting from (abs), 269
Metastases, bone, from carcinoma of prostate, relationship of serum acid phosphatase determination to presence of (abs), 284
distant, from carcinoma of urinary bladder (abs), 282
distant, in cancer of upper respiratory and alimentary tracts (abs), 136
of primary carcinoma of breast (abs), 136
soft tissue, from multiple myeloma (abs), 137
subepidermal lymphatic, confused with operative sequelae (abs), 135
testicular tumor, irradiation control of (abs), 562
Metastatic carcinoma of epididymis (abs), 283
Meter, Edward George, 1876–1943, obituary, 694
portrait, 694
Metrazol therapy, fractures of vertebrae following (abs), 428
Mice, single and parabiotic, indirect effect of roentgen rays in, 662
Miliary calcification of lung, 777
Milliammeters at ground potential in roentgen tube circuits (abs), 574
Minnesota Radiological Society, 698
Mongoloid deficiency, malformation of heat in (abs), 705
Mouse sarcoma 180, effect of high and low body temperatures upon growth of irradiated (abs), 568
Mouth, carcinoma of (abs), 705
Mucosa, normal, of duodenum, roentgenologic consideration of (abs), 832
Mucous membranes, artificial decrease of radiosensitivity of, in roentgen therapy, 811
Multipolar cell division, induction of, with roentgen rays, possible significance (abs), 569
Myelography, contrast, interpretation of, in diagnosis of posterior protrusion of intervertebral disc, 199
intraspinal thorotrast used in, 214
thorotrast, demonstration of ruptured intervertebral disc by (abs), 426
Myeloma, endothelial (abs), 285
multiple, with special reference to soft tissue metastasis (abs), 137
Myxomatous cutaneous cysts, roentgen treatment of (abs), 566

Nasal sinusitis (abs), 707
Nasopharynx, carcinoma of (abs), 706
National Bureau of Standards, new x-ray laboratory of (abs), 570
Navicular bone of foot, bipartite (abs), 426
retrolunar dislocation of capitate with fracture or subluxation of (abs), 288
Necator americanus, infestation with, cause of deficiency pattern in small intestine, 719
Necrosis, aseptic, of femoral head following traumatic dislocation of hip (abs), 428 post-traumatic, of bone, 593
Nephrectomy in certain renal tumors (abs), 281
Neurinoma of thorax, roentgen diagnosis of (abs), 715
Neurogenic tumors, intrathoracic (abs), 714
Neutron emission from generator operating at 300 kv. (abs), 144
Nomogram for determination of lead protection against high voltage roentgen rays (abs), 432

Obstetrical pelvicephalometry, roentgenographic, in erect posture, 731
Obturator sign in early roentgen diagnosis of septic arthritis of hip (E), 117
Oil aspiration pneumonia, 177
Ointment for relief of discomfort due to severe irradiation epidermitis (abs), 566
Os naviculare pedis, bipartite (abs), 426
Ossification in epiphyses and short bones of extremities, variability in onset of, 795
Osteochondritis dissecans of ankle joint, use of tomography as diagnostic aid (abs), 426

Osteogenesis imperfecta, its incidence and manifestations in seven families (abs), 133
Osteogenic sarcoma (abs), 135
Osteoma of bladder (abs), 283
Osteomyelitis, pyogenic, of thoracic spine presenting as primary pulmonary disease, 219
Osteopetrosis, prenatal diagnosis of, 455
Osteopoikilosis, 603
Otorrhea, chronic, radium therapy as aid in control of, 234
Ovaries, metastasis to, from primary carcinoma of breast (abs), 136

Palate, malignant tumors, end-results of treatment of (abs), 140
Pancreas, acute necrosis of (abs), 832
carcinoma of head of, new signs in roentgen diagnosis, 197
lithiasis of (abs), 276
tumors of, roentgen study (abs), 276
Papilloma, malignant, complicating diverticulum of bladder (abs), 283
Pelvic and fetal diameters, accuracy of roentgen estimates of (abs), 834
Pelvicephalometry, roentgenographic obstetrical, in erect posture, 731
Pelvimetry, roentgen, analysis of, by Johnson stereoroentgenometer in 379 cases, 742
Pelvis, roentgen irradiation of, in carcinoma of cervix uteri (abs), 558
Pericarditis, chronic constrictive, contributions of roentgenology to diagnosis of, 349
Periosteal fibrosarcoma (abs), 134
Peristalsis, common bile duct (abs), 132
Peritendinitis calcarea in shoulder joint, treatment of (abs), 558
Peritoneum, intraperitoneal localized abscess, roentgen aid in diagnosis (abs), 276
Persimmon phytobezoar (abs), 130
Pfahler, George E., science hall named in honor of, 263
Pharynx, cancer, surgery and radiation therapy in treatment (abs), 139
roentgen examination of, 587
Phlegmon, periurethral (abs), 837
Phosphatase determination, serum acid, relationship of, to presence of bone metastases from carcinoma of prostate (abs), 284
Photography, miniature screen, comparison of, with direct roentgenography (abs), 567
Photoroentgen unit, stereoscopic, ten thousand chest examinations with, 469
Physical factors concerned in indirect roentgenography, research into (abs), 570; (abs), 571
investigations with 140 kv. (peak) radiation (abs), 572
Physics, recent contributions of, to radiology (abs), 570
Phytobezoar, persimmon (abs), 130
Placenta, roentgenologic localization of, without contrast media, 750
Pleural effusion, roentgenographic study of (abs), 274
Pleurisy, mediastinal, in infants, 145
Pneumonia, experimental, in guinea pig, roentgen treatment of (abs), 569
lipoid, report of case simulating bronchial carcinoma (abs), 711
oil aspiration, 177
virus, 30
virus, roentgen therapy of, 635
Pneumonitis, virus, with bronchopneumonia, roentgenographic characterization of, 30
Pneumoperitoneum, spontaneous, roentgen sign found in supine position (abs), 833
Polycythémia, absorption and distribution of radio-phosphorus in blood of, its excretion by, and its therapeutic effect on, patients with (abs), 142
Prevesical spaces, roentgen demonstration of (abs), 283
Prostate gland, effects of castration on advanced carcinoma of (abs), 836
leiomyosarcoma of (abs), 836
lymphosarcoma of (abs), 836
relationship of serum acid phosphatase determination to presence of bone metastases from carcinoma of (abs), 284
treatment of carcinoma of, with irradiation of testicles (abs), 562
Protection, features of, provided with United States Army Field roentgenoscopic equipment, 653
lead, nomogram for determination of, against high volatge roentgen rays (abs), 432
Protective device, radium loading, new type of, 803
Protrusion, posterior, of intervertebral disc, diagnosis of, 199
Pseudofractures in diseases affecting skeletal system (abs), 287
Pyelograms, atypical, in cystic disease of kidney (abs), 278
in essential or hormonal hypertension (E), 692
retrograde, backflow of opaque medium in (abs), 278
excretion, increasing density of renal shadow during (abs), 278
excretory, for children (abs), 279
intravenous, in upright position (abs), 279
intravenous, value of, in study of metastasis of testicular tumors (abs), 562
layer formation in, 783
Pyelonephritis, localized obliterating (abs), 282
Pyelorenal backflow (abs), 278
Pylorus, new roentgen sign of obstruction of (abs), 275
Pyogenic osteomyelitis of thoracic spine presenting as primary pulmonary disease, 219

Rabbit, effect of roentgen irradiation on capillary permeability and inflammation in skin of, 250
Radiation damage to tissue and its repair (abs), 139
depth dose calculation wherein absorption in unit volume in depth is index of effective (abs), 572
dosage, integration of, and absorption of energy in tissue for roentgen and gamma radiation (abs), 573
hazards during roentgenoscopy, 639
140 kv. (peak) physical investigations with (abs). 572
sickness. See Irradiation sickness
stray, in fluoroscopic room, 123
surface, distribution of, from million-volt generator (abs), 573
teletherapy, homogeneity of dosage distribution in (abs), 573
therapy, late results in benign giant cell tumor of bone obtained by (abs), 431
treatment of lymphangioma, 799
Radioactive substances, short-lived, harmlessness of, 240
Radiological Research Laboratory of Columbia University, 263
Radiologists, open letter to, 121
Radiology, recent contributions of physics and engineering research to (abs), 570
Radio-phosphorus, absorption and distribution of, in blood of, its excretion by, and its therapeutic effect on, patients with polycythemia (abs), 142
clinical studies with aid of (abs), 142
retention in blood, excretion and therapeutic effect of, on patients with leukemia (abs), 142
Radiosensitiveness of bone marrow (abs), 568
Radiosensitivity of skin and mucous membranes in roentgen therapy, artificial decrease of, 811
Radiotherapy of lymphoblastoma (abs), 565
Radium and supervoltage roentgen rays, technique of irradiation of cancer of uterine cervix combining (abs), 560
cavernous hemangioma of face in infant treated with, 816
distribution factor in therapy of carcinoma of cervix (abs), 560
instrument for inserting multiple capsules of, within uterus in treatment of corpus cancer, 504
loading protective device, new type of, 803
malignant disease of rectum and rectosigmoid treated with (abs), 561
therapy, mild, definition and method of application, 240
therapy, results of present method of, as influenced by stage and grade of cancer of uterus, 487
toxicity of, 240
Radon seed, accurate placement of, by suture method (abs), 141
treatment, 240
Rats, albino, effect of roentgen rays upon growing long bones of, 321
albino, experimental studies upon, on effect of roentgen irradiation on epiphyseal growth, 104
effect of roentgen irradiation upon lymphatic flow in (abs), 567
Rectosigmoid, cancer of, treatment with radium (abs), 561
Rectum, cancer of, treatment with radium (abs), 561
dyschezia of (abs), 717
lympho-granuloma inguinale producing stricture of (abs), 277
post-irradiation stricture of, following treatment for cervical cancer, 307
roentgenologic features of tuberculosis of (abs), 277
urological complications of cancer of (abs), 284
Respiratory tract, upper, distant metastasis in cancer of (abs), 136
Rhesus monkey, cyclic changes in mammary gland of (abs), 143
Rheumatoid arthritis of apophyseal intervertebral joints, development, clinical manifestations and treatment of, 49
Rhoads, C. P., Caldwell lecturer, 1942, 289
portrait opposite page 289
Roentgen changes in cranial vault accompanying diseases resulting from metabolic disturbances (abs), 269
cinematography and electrocardiography, study of cardiac movements simultaneously recorded by (abs), 570
demonstration of prevesical spaces (abs), 283
diagnosis, early, of septic arthritis of hip, obturator sign in (E), 117
diagnosis of fractures, limitations of (abs), 133
estimates of pelvic and fetal diameters, accuracy of (abs), 834
film, miniature, of chest (abs), 715
irradiation, effect of, on capillary permeability and inflammation in skin of rabbit, 250
irradiation, effect of, on epiphyseal growth, 104
irradiation, effect of, upon lymphatic flow in rats (abs), 567
irradiation, experiences with, following operation on brain tumors, 480
laboratory, new, of National Bureau of Standards (abs), 570
measurement of visual acuity in cataractous eyes (abs), 269
radiation, effect on rate of cure of cancer of cervix, of increased roehtgen radiation to parametria, 519
radiation in experimental *Clostridium welchii* infection in dogs (abs), 564

-ray equipment and accessories, urgent need of conserving, 263
-ray findings compared with patch and PPD tests (abs), 712
-ray generator, million-volt, distribution of surface radiation from (abs), 573
-ray measurements, portable "back-scatter phantom" for (abs), 144
-ray stereoptics, investigation into some practical aspects of, 682
-ray tube, evolution of (abs), 143
rays, clinical observations on use of 3 million volt, 536
rays, effect of, upon growing long bones of albino rats, 321
rays, hard, effect of, on intestines of normal dogs fed on inorganic iron compounds (abs), 142
rays, high voltage, nomogram for determination of lead protection against (abs), 432
rays, indirect effect of, in single and parabiotic mice, 662
rays, induction of multipolar cell division with, possible significance (abs), 569
rays, production and characteristics of 3,000 kilovolt, 531
rays, reaction of kidney tubules in tissue culture to (abs), 569
rays, supervoltage, and radium, technique of irradiation of cancer of uterine cervix combining (abs), 560
sign, new, of pyloric obstruction (abs), 275
signs of infantile scurvy, critical analysis, 575
therapy as aid in control of chronic otorrhea, 234
therapy, deep, treatment of Hunner's ulcer with (abs), 563
therapy, effect of, for closure of epiphyses (abs), 558
therapy, evolution of dosimeters in (abs), 572
therapy for chronic macrolymphocytic and mesolymphocytic lymphatic leukemia (abs) 565
therapy in tuberculous cervical lymphadenitis (abs), 563
therapy, limitations of biopsy in (abs), 566
therapy, low voltage contact (abs), 429; (abs), 430
therapy, megavoltage (E), 540
therapy, million volt, for intrathoracic cancer, 299
therapy of gas gangrene, twelve year review of (abs), 564
therapy of hemangiomata (abs), 564
therapy of myxomatous cutaneous cysts (abs), 566
therapy of virus pneumonia, 635
therapy, supervoltage, results obtained with, in treatment of gynecological cancer (abs), 141
therapy tubes, contact, simple way to hold filter in place on, 128
therapy, use of intravesical low voltage contact, in cancer of bladder (abs), 429
therapy use of vitamin B_1 in, for prevention of irradiation sickness, 83
treatment in chronic asthma, therapeutic value in, 227
treatment of cancer of esophagus, 606
treatment of experimental pneumonia in guinea pig (abs), 569
treatment, protracted, of malignancies, particularly of head and face (abs), 140
tube circuits, milliammeters at ground potential in (abs), 574
Roentgenograms, duplication of, by light reversal process, 554
lateral, of femoral neck, device to aid in positioning of, 264
Roentgenographic mensuration, simple calculator for (abs), 574
study of relative incidence of gastric and duodenal ulcer (abs), 275
Roentgenography as diagnostic aid in pulmonary fat embolism (E), 410
direct, comparison of miniature screen photography with (abs), 567
in immediate connection with roentgenoscopy, apparatus for (abs), 567
indirect, optimum combination of film and fluorescing screen for use in (abs), 570
indirect, research into physical factors concerned in (abs), 570; (abs), 571
mass, rôle of, in tuberculosis (abs), 270
of external ear, 420
Roentgenologic considerations in diagnosis and treatment of primary malignant bone tumors (abs), 285
examination and, not or, gastroscopy (E), 259
Roentgenologist and gastroscopist, value of cooperation between (abs), 716
Roentgenology, contribution of, to diagnosis of chronic constrictive pericarditis, 349
of femoropatellar joint (abs), 425
of renal tuberculosis (abs), 279
Roentgenoscopic equipment, United States Army Field, protective features provided with, 653
Roentgenoscopy, apparatus for roentgenography in immediate connection with (abs), 567
radiation hazards during, 639
Roger's disease, diagnosis of, 366
Rupture, spontaneous, of renal pelvis (abs), 280
subcapsular, of kidney (abs), 280

Sarcoma 180, mouse, effect of high and low body temperatures upon growth of irradiated (abs), 568
osteogenic (abs), 135
Sclerosis, tuberous, three cases of cystic lungs from (abs), 271

Screen, fluorescing, effect on luminous output of variation of crystal size of (abs), 571
fluorescing, quantitative estimation of actinic value of afterglow of (abs), 571
fluorescing, simple method of detecting experimentally presence of phenomenon of latent image reinforcement in (abs), 571
Scurvy, infantile, critical analysis of roentgen signs of, 575
Sedimentation reaction, significance of, in regard to prognosis of irradiation of cancer patients (abs), 567
Shockproof cables and condensers, effect of, on two-valve half-wave rectification (abs), 571
Shoulder joint, further studies of, with special reference to bicipital groove (abs), 288
joint, treatment of peritendinitis calcarea in (abs), 558
roentgen irradiation of calcareous deposits about (abs), 558
Sigmoid, post-irradiation stricture of, following treatment for cervical cancer, 307
volvulus of (abs), 277
Silicosis (abs), 708
acute, occurring in employees of abrasive soap powder industries (abs), 708
Silicotic lesions, factors involved in production and development of (abs), 708
Sinuses, dermal (abs), 137
Sinusitis, nasal (abs), 707
Skeletal system, pseudofractures in diseases affecting (abs), 287
Skin, artificial decrease of radiosensitivity of, in roentgen therapy, 811
diseases of, irradiation in (abs), 566
myxomatous cysts of, roentgen treatment (abs), 566
of rabbit, effect of roentgen irradiation on capillary permeability and inflammation in, 250
Skull, roentgen changes in vault of, accompanying diseases resulting from metabolic disturbances (abs), 269
Soap powder, abrasive, industries, acute silicosis occurring in employees of (abs), 708
Spinal canal, use of thorotrast in roentgenologic study of, 214
cord, intramedullary epidermoid cyst of (abs), 839
cord, tumors of, roentgen therapy of (abs), 431
cord veins, roentgen diagnosis of dilatations of, 476
Spine, lipiodol misplaced in (abs), 838
thoracic, pyogenic osteomyelitis of, presenting as primary pulmonary disease, 219
Spleen, metastasis to, from primary carcinoma of breast (abs), 136
Spondylitis, syphilitic, 756
Stenosis, aortic diagnosis of, 366
bronchial, and unexpandable lungs (abs), 709
pulmonary, diagnosis of, 366
Stereoptics, roentgen-ray, investigation into some practical aspects of, 682
Stereoroentgenograms, device for measuring depth in single-film, 682
single-film, new and simple method of stereoroentgenography, 682
Stereoroentgenography, fallacy in current practice of, 682
Stereoroentgenometer, John, analysis of roentgen pelvimetry by, in 379 cases, 742
Stewart, Harry Myrrel, 1876–1942, obituary, 413
portrait, 413
Stomach, bleeding associated with extramucosal tumors of, 442
cancer, factors influencing curability of (abs), 131
carcinoma, classification of (abs), 130
diaphragmatic hernia of (abs), 276
leiomyosarcoma of, 393
roentgen visualization of, without use of contrast media (abs), 275
secondary lymphosarcoma of, 450
Stricture, post-irradiation, of rectum and sigmoid following treatment for cervical cancer, 307
rectal, lymphogranuloma inguinale producing (abs), 277
Subluxation of navicular bone, retrolunar dislocation of capitate with fracture of (abs), 288
Surgery and irradiation, combined, in treatment of carcinoma of pelvic colon (abs), 561
Surgical aspects of ruptured intervertebral disc (abs), 426
problem of chronic gastritis (abs), 130
Suture method, accurate placement of radon seed by (abs), 141
Synovioma, roentgenographic recognition of (abs), 286
Syphilis, vertebral, roentgenographic diagnosis of (abs), 427
Syphilitic spondylitis, 756

Talc dust, compensation claims for disability due to, in New York State, 11
miners and millers in St. Lawrence County, New York, report of study of, 11
mining, tremolite, dust hazard in, 11
workers, roentgenological findings in, 11
Temperatures, effect of high and low body, upon growth of irradiated mouse sarcoma 180 (abs), 568
Teratoma testis (abs), 837
Testicles, irradiation control of metastases from tumors of (abs), 562
treatment of carcinoma of prostate with irradiation of (abs), 562
Testis, teratoma of (abs), 837
Tests, patch and PPD, and roentgen-ray correlation (abs), 712
Tetralogy of Fallot (abs), 273
of Fallot, diagnosis of, 366

Thorax, blast injuries of, roentgen aspect of pulmonary changes following exposure to high pressure waves (abs), 712
intrathoracic cancer, million volt roentgen therapy for, 299
intrathoracic manifestations of the lymphomatoid diseases (abs), 273
miniature x-ray film of (abs), 715
roentgen diagnosis of neurinoma of (abs), 715
ten thousand examinations of, with stereoscopic photoroentgen unit, 469
traumatic lung changes through blunt violence to, roentgen investigation (abs), 271
Thorotrast, intraspinal, 214
myelography, demonstration of ruptured intervertebral disc by (abs), 426
Thymus, relation of mediastinal shadow to, 159
Tissue culture, reaction of kidney tubules in, to roentgen rays (abs), 569
integration of radiation dosage and absorption of energy in, for roentgen and gamma radiation (abs), 573
radiation damage to, and its repair (abs), 139
soft, metastasis to, from multiple myeloma (abs), 137
Tomography, use of, as diagnostic aid in osteochondritis dissecans of ankle joint (abs), 426
Tracheoesophageal fistula, congenital (abs), 713
Trauma, lesions of lungs from blunt violence to thorax, roentgen investigation (abs), 271
necrosis of bone following, 593
Tremolite talc mining, dust hazard in, 11
Tubercle, Ghon's, 463
Tuberculin tests and roentgen-ray correlation (abs), 712
Tuberculoma of kidney (abs), 281
Tuberculosis, bone and joint, statistical and roentgen analysis of 200 cases of (abs), 425
examination for, with stereoscopic photoroentgen unit, 469
irido-cyclitis, and uveo-parotitis, roentgen aspects of investigation into relationship of (abs), 270
of rectum, roentgen features of (abs), 277
primary, in adolescents and young adults (abs), 709
pulmonary, relation of chronic cor pulmonale to (abs), 710
renal, roentgenology of (abs), 279
rôle of mass roentgenography in (abs), 270
Tuberculous cervical lymphadenitis, roentgen therapy in (abs), 563
Tumor, benign giant cell, of bone, late results in, obtained by radiation therapy (abs), 431
Ewing's, gradation of (abs), 285
Wilms', treatment of (abs), 561
Tumors, brain, experiences with roentgen irradiation following operation on, 480
brain, irradiation of, at Bellevue Hospital 1924–1929 (abs), 430
certain renal, exploration of (abs), 281
extramucosal, of stomach, bleeding associated with, 442
hypernephroid (abs), 835
intrathoracic neurogenic (abs), 714
malignant, of palate, end-results of treatment of (abs), 140
of adrenal, use of air insufflation in diagnosis (abs), 835
of brain, roentgen therapy of (abs), 431
of spinal cord, roentgen therapy of (abs), 431
of urethra (abs), 837
pancreatic, roentgen study (abs), 276
primary malignant bone, roentgenologic considerations in diagnosis and treatment of (abs), 285
renal, calcification of, 580
solid renal, in children, limitations of irradiation of (abs), 562
Tympany of uterus diagnosed by roentgen examination (abs), 834

Ulcer, gastric and duodenal, roentgenographic study of relative incidence of (abs), 275
Hunner's, treatment of, with deep roentgen therapy (abs), 563
syndrome, duodenal, caused by ankylostomiasis, 39
Ureter, roentgen sign of acute obstruction of (abs), 278
Urethra, tumors of (abs), 837
Urinary extravasation (abs), 837
Urography. See Pyelography
Urological complications of cancer of rectum (abs), 284
Urology award, 123
Uterus, cancer, results of present method of radium therapy as influenced by stage and grade of lesion, 487
cervix, cancer, effect on rate of cure of increased roentgen radiation to parametria, 519
cervix, cancer, elimination of irradiation injuries in treatment of, 494
cervix, cancer, irradiation in (abs), 559
cervix, cancer, irradiation of, combining radium and supervoltage roentgen rays (abs), 560
cervix, cancer, isodose charts for fields of special usefulness in treatment of, 819
cervix, cancer, post-irradiation stricture of rectum and sigmoid following treatment for, 307
cervix, carcinoma, radium distribution factor in therapy of (abs), 560
cervix, carcinoma, roentgen irradiation of pelvis in carcinoma of (abs), 558
instrument for inserting multiple capsules of radium within, in treatment of corpus cancer, 504
roentgen diagnosis of intrauterine hydrocephalus (abs), 834

tympany of, diagnosed by roentgen examination (abs), 834
Uveo-parotitis, irido-cyclitis and tuberculosis, roentgen aspects of investigation into relationship of (abs), 270

Veins, of spinal cord, roentgen diagnosis of dilatations of, 476
Vertebra, dorsal, sarcomatous destruction of, associated with aneurysm of intercostal artery (abs), 274
Vertebrae, cervical, degenerative arthritis of (abs), 840
fractures of, following metrazol therapy (abs), 428
hemangioma of (abs), 427
roentgenographic diagnosis of syphilis of (abs), 427
Virginia Radiological Society, 264
Visual acuity in cataractous eyes, roentgen measurement of (abs), 269
Vitamin B_1, use of, in roentgen therapy, to prevent irradiation sickness, 83
Vitamins B_1 and C and small intestinal change in radiation sickness (abs), 138
Volvulus of sigmoid (abs), 277

War conference, 548
Wilms' tumor, treatment of (abs), 561
Wrist, two unusual injuries of (abs), 287

AUTHOR INDEX TO VOLUME 49

Ackerman, Lauren V., 710
Adson, Alfred W., 427
Aitken, A. P., 286
Altman, W. S., 833
Amor, Arthur J., 125
Ané, J. N., 742
Anthony, Benjamin W., 600
Apfelbach, George L., 708
Arbuckle, Millard F., 139
Arce, José, 132
Arneson, A. N., 504
Arons, Isidore, 565
Ash, J. E., 835
Ashbury, Howard Hicks, 566
Austen, George, Jr., 580

Bachman, Arnold L., 219
Badgley, Carl E., 135
Baird, L. W., 558
Baker, D. R., 398
Baker-Bates, E. T., 715
Ball, Robert P., 272, 731
Balyeat, Ray M., 227
Banks, Sam W., 428
Barnes, W. A., 662
Barr, Joseph S., 104
Barringer, Benjamin S., 837
Batts, Martin, 134
Batts, Martin, Jr., 135
Beck, Claude S., 273
Beilin, D. S., 276
Belanger, George, 431
Bell, Leo, 159
Benda, C. E., 705
Berg, Gunnar, 271
Berger, R. A., 564
Bernstein, Louis, 705
Bieren, Roland E., 131
Binks, W., 432
Binnig, C., 284
Bird, Gustavus C., Jr., 554
Birkelo, Carl C., 715
Bloch, Robert G., 463
Boland, Thomas B., 717
Bolker, Herman, 135
Borley, W. E., 269
Bowen, J. Andrew, 279
Bowing, Harry H., 487, 516, 561
Bradshaw, Howard H., 714
Braestrup, Carl B., 819
Braund, Ralph R., 136
Broadbent, M., 712
Bromer, Ralph S., 575
Brown, Samuel, 276
Brunn, Harold, 130
Bugbee, H. G., 281
Buirge, Raymond E., 132
Bunts, A. T., 426
Buschke, Franz, 450, 559

Cade, Stanford, 125
Cahill, George F., 835
Cameron, Gladys, 569
Camiel, Mortimer R., 135
Camp, John D., 287
Campbell, Darrell A., 135
Campbell, Willis C., 285
Cantril, Simeon T., 450, 559
Carpender, J. W. J., 398
Carter, B. N., 195
Carter, J. Bailey, 708
Carter, Ralph M., 287
Carty, John R., 349
Cassen, Benedict, 570
Caulk, Ralph M., 99
Cave, Edwin French, 288
Chamberlain, W. Edward, 263
Chambers, Robert, 569
Chan, B. C., 142
Che, Y. T., 706
Chont, L. K., 227
Christiansen, Harald, 272
Christie, A. C., 263
Chuinard, Eldon L., 288
Cipollaro, Anthony C., 566
Clancy, F. J., 283
Clapesattle, H. B., 549
Clark, K. C., 567
Clarkson, J. R., 573, 606
Clement, Gage, 708
Cloud, R. W., 531
Cohen, William, 425
Collings, C. W., 283
Colmers, Rudolf A., 717
Cookson, H. N., 712
Corrigan, K. E., 537
Couch, J. H., 134
Cowie, Dean B., 639, 653, 803
Craig, W. Johnston, 275
Craver, Lloyd F., 273
Crilly, James A., 719
Crimm, Paul D., 712
Crossan, John W., 429
Crump, Armistead C., 272
Curl, Howard, 250

Dailey, Morris E., 130
Daland, Ernest M., 139
Davidoff, Leo M., 476
Davidson, S. Whately, 716
Delano, Percy J., 717
Delfs, E., 834
de Lorimier, Alfred A., 639, 653, 660
Denstad, Torfinn, 568
de Rouville, William H., 137
Digby, K. H., 706
Dippel, A. Louis, 834
Dobos, E. I., 713
Donaldson, J. M., Jr., 711
Donhauser, J. Lewi, 137
Doub, Howard P., 103, 426, 561
Douglas, Bruce H., 715
Dowdy, Andrew H., 234, 564, 803
Dowell, D. Arnold, 265, 564
Dresser, Richard, 536, 538
Dubilier, Benjamin, 803

Earl, David, 837
Edling, Nils P. G., 274
Emerson, Ernest B., Jr., 234
Epstein, Bernard E., 264, 476
Erf, L. A., 142
Erickson, Theodore C., 126
Ettinger, Alice, 783

Farber, Jason E., 709
Farley, Maude S., 431
Faulkner, William B., Jr., 715
Feldman, Maurice, 132, 275, 832
Fine, Archie, 276
Finestone, Edward O., 837
Firor, Whitmer B., 126
Flint, H. T., 573
Fook, W. L., 706
Fowler, H. A., 281
Freedman, Eugene, 756
Freedman, Lester J., 566
Fricke, Robert E., 487, 561
Fried, Carl, 569
Friedman, Milton, 516
Friedman, Paul S., 197
Frostberg, Nils, 834
Fuchs, Arthur W., 420
Fulton, Huston F., 603
Furth, O. B., 662

Gall, Edward A., 104
Garland, L. Henry, 123
Geever, Erving F., 777
Gengenbach, F. P., 713
Ghormley, Ralph K., 427
Glasser, Otto, 572
Glücksmann, A., 568
Goin, Lowell S., 429
Gold, Rubin L., 130
Golden, Ross, 729, 731
Goldhamer, Karl, 702
Golts, H. L., 573
Gosse, A. Hope, 274
Gowar, F. J. Sambrook, 713

Graves, R. C., 837
Gray, L. H., 144
Greenburg, Leonard, 11
Greenfield, Henry, 282
Grier, G. W., 366, 707
Griffith, John Q., 567
Grishman, A., 273, 766
Gross, Sidney W., 706
Guiss, L. W., 837

Haldeman, Keene O., 288
Hallberg, O. Erik, 140
Hamby, Wallace B., 838
Hames, Fred, 141
Hamilton, J. F., 285
Hampton, Aubrey O., 433, 442
Hand, J. R., 280
Happey, F., 144, 573
Hare, Hugh F., 269
Harkins, Henry N., 266
Harper, R. A. K., 832
Harrington, Stuart W., 185, 196
Hart, Vernon L., 287
Harvey, Roger A., 145
Hauser, Harry, 563
Hawes, Lloyd E., 799
Healy, William P., 1, 519
Hendricks, J. W., 562
Henny, George C., 554
Henshaw, Paul S., 569
Herger, C. C., 284
Hill, Harold A., 288
Hinkel, Charles L., 321
Hodes, Philip J., 430, 567
Hodges, Clarence V., 836
Hodges, Fred M., 564
Hoecker, Frank E., 143
Hoffman, Eugene F., 429
Holmes, George W., 701, 799
Holmes, L. P., 834
Holmgren, Bengt S., 277
Hoover, Ruben, 603
Hopwood, F. L., 143
Horwitz, Thomas, 199
Howell, R. D., 562
Howes, William E., 285, 705
Huggins, Charles, 836
Hull, Wayne M., 227
Hyams, J. A., 282

Israel, Harold L., 709

Jacinto, Carmelo P., 709
Jacobs, A. W., 816
Jacobs, Lewis G., 572
Jacoby, Paul, 567
Jacox, Harold W., 480, 566
Jellen, Joseph, 429
Jenkinson, E. L., 455
Jennings, Charles G., 829
Jessel, G., 270
Jones, Horace C., 561

Kamperman, George, 141
Kaplan, Ira I., 126, 430
Kasuga, Kazumi, 710
Katzen, P., 283
Kaufmann, William, 836
Kelly, James F., 265, 564
Kenyon, H. R., 282
Kerst, Donald W., 538
Kibby, Sydney V., 286
Kirklin, B. R., 259, 263
Kirwin, Thomas J., 835
Klein, Edward, 682
Klein, Harold, 682
Klein, I., 558
Klein, Milton, 682
Klemes, I. S., 558
Klinghoffer, Stephen, 240
Knutsson, Folke, 425
K'o, Y. K., 142
Koerth, C. J., 711
Kornblum, Karl, 714
Koven, M. T., 264
Krause, George R., 428, 719, 730
Kremer, Wilhelm, 701
Kreutzmann, H. A. R., 563
Krusen, Frank H., 266
Kulick, Max, 264

Lachman, Ernest, 133
Lahoz, Manuel, 709
Lamerton, L. F., 572, 573
Langsam, Charles L., 428
Latteier, K. K., 455
Lawrence, J. H., 142
Lehmann, Pierre, 811
Lemon, Willis S., 708
Lenz, Maurice, 515
Leucutia, T., 431, 543
Levitin, Joseph, 276, 469
Levy, A. H., 276
Lewis, R. I., 277
Lewis, Raymond W., 593
Licht, Erik de Fine, 426
Liljencrantz, Eric, 560
Lindgren, Erik, 567
Lingley, James R., 104
List, Carl F., 137
Long, Esmond R., 709
Lozner, Eugene L., 405
Lutz, J. Fletcher, 138
Lyons, Clinton G., 393

McCarthy, J. E., 276
McCorkle, R. G., 711
McCullough, J. A. L., 287
Macdonald, Dean, 132
McDonald, Eugene J., 405, 718
McGibbon, John E. G., 706, 715
McMullen, J. W., 275
McNeill, Clyde, 550
McNeill, James H., 130
Macy, Icie G., 550
Mandeville, F. B., 431
Marinelli, L. D., 574
Martin, Charles L., 494, 518
Martin, Hayes E., 136
Martin, Mary, 455
Mayneord, W. V., 144, 573
Mazer, Morton L., 30
Melody, George F., 426
Mensor, Merrill C., 426
Menville, Leon J., 742
Merritt, E. A., 99
Mertz, H. O., 562
Meschan, I., 756
Meyer, William H., 572
Moel, Morris, 177
Mullen, Thomas F., 131
Munger, A. D., 562

Nash, Joseph, 551
Nathanson, Louis, 425
Nessa, Curtis B., 271
Neuhauser, Edward B. D., 829
New, Gordon B., 140
Newell, R. R., 269, 560
Newman, Allen T., 682
Nolan, James F., 504
Nosik, William A., 214
Nowell, Stanley, 278

Odessky, I. N., 715
Ogilvie, Robertson F., 832
O'Neill, John R., 715
Oppenheimer, Albert, 49, 635
Outland, Tom, 398

Pardo-Castello, V., 551
Parker, H. M., 559
Parker, Morris L., 136
Paterson, Ralston, 282
Paul, L. W., 271
Pendergrass, E. P., 263, 430
Pendergrass, Robert C., 729
Penfield, Wilder, 126
Perry, S. P., 398
Pfisterer, W. H., 455
Pohle, E. A., 271
Pollack, Herbert C., 600
Popp, Walter C., 565
Poppel, M. H., 276
Portis, Sidney A., 833
Portmann; U. V., 128, 263
Poulsson, K. T., 567
Powers, Robert A., 707
Pratt, Jean P., 561

Priestley, J. T., 561
Prince, C. L., 836
Pyle, Idell, 795

Quick, Douglas, 10

Raap, Gerard, 77
Randall, A., 562
Read, John, 144
Rees-Jones, G. F., 275, 706
Reinhard, M. C., 573
Renander, Axel, 277, 280
Retzlaff, Leonore, 701
Rhinehart, B. A., 140
Rhinehart, D. A., 140
Rhoads, C. P., 289
Ridlon, G. R., 278
Riesenman, F. Regis, 133
Rigdon, R. H., 250
Rigler, Leo G., 271, 833
Rigos, Frank J., 274
Ritterhoff, R. J., 708
Ritvo, Max, 718
Roberts, Ff., 431, 566
Robertson, H. F., 134
Robertson, T. D., 280
Robinson, J. Maurice, 558
Rodenbaugh, F. H., 715
Ronayne, Frank J., 717
Rose, J. Dudfield, 716
Rosenbaum, George, 699
Rowe, Stuart N., 480
Ruggles, Howard E., 701
Russell, D. A., 431

Sachs, Maurice D., 288, 713
Sahler, Otto D., 433, 442
Sandel, Samuel T., 279
Sandler, Bernard, 560
Sanford, Hawley, 426
Saphir, Otto, 136
Sauer, H. R., 284
Schenck, Samuel George, 285
Schindler, Rudolf, 130
Schneider, Martin, 393
Schulte, T. L., 561
Seal, John R., 349
Seaman, J. A., 284
Seeds, Asa E., 30
Sewell, Robert L., 564
Sgalitzer, Max, 427
Shapiro, A. V., 159
Shehadi, William H., 39
Shiflett, E. Lee, 279
Siegal, William, 11
Silverstone, Sidney M., 819
Singer, J. J., 711
Smith, Adelaide Ross, 11
Smith, R. Manges, 750
Smith, William M., 130
Smithers, D. W., 606
Snead, L. O., 564
Snow, William, 265
Solomon, Harry A., 219
Sontag, L. W., 795
Soto-Hall, Ralph, 288
Spangler, Davis, 558
Speert, Harold, 143
Spillman, Ramsay, 545
Spotoft, J., 567
Stanford, Brian, 570, 571
Starks, Dorothy J., 707
Stauffer, Herbert M., 554
Stebbins, T. L., 279
Steinberg, M. F., 273, 766
Steiner, Paul E., 130
Stevens, R. E., Jr., 836
Stewart, Harold J., 349
Stirling, W. Calhoun, 835
Stone, Robert S., 558
Strauss, B., 283
Strong, J. A., 606
Stutsman, A. C., 139
Sugiura, Kanematsu, 568
Sussman, M. L., 273, 766

Taft, Robert B., 659
Taylor, Henry K., 177
Taylor, Hermon, 716
Taylor, Lauriston S., 570, 660
Thomas, A. Robinson, 712
Thomas, Gilbert J., 279
Thompson, Roy H., 603
Ting, T. P., 574
Torpin, Richard, 834
Tragerman, L. J., 711
Trump, J. G., 531
Tu, C. L., 142
Tuttle, L. W., 142
Twombly, Gray H., 519

Urban, Jerome, 299, 306

Vest, S. A., 836
Vieta, John O., 273

Wallace, William S., 138
Wangensteen, Owen H., 700
Wasson, W. Walter, 718
Waters, Charles A., 126
Watkins, Charles H., 565
Watson, William L., 299
Weatherwax, J. L., 123
Welebir, F., 283
West, Theodore S., 659
Westermark, Nils, 271, 570
Westing, Siegfried W., 587
White, J. Duncan, 717
White, Thomas N., 639, 653
Whitmore, William H., 83
Wigby, Palmer E., 307
Williams, E. Rohan, 270, 278, 280
Williams, Marvin M. D., 571
Wilson, C. W., 432, 573
Wirth, John E., 305
Witwer, E. R., 431
Wolf, Bernard S., 819
Wright, Arthur W., 836
Wyatt, George M., 279

Yater, Wallace M., 133
Yenikomshian, H. A., 39

Zachrisson, C. G., 271